

10797723\_CLS.txt  
Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10797723 on January 26, 2005

Original Classifications

4 250/251  
3 204/298.04  
3 250/423R  
3 250/427  
3 313/359.1  
2 60/202  
2 204/192.11  
2 250/492.21  
2 315/111.21  
2 315/111.81  
2 315/111.91

Cross-Reference Classifications

8 250/423R  
8 315/111.81  
6 313/231.31  
6 315/111.41  
5 315/111.31  
4 204/298.16  
4 313/359.1  
4 313/362.1  
4 313/363.1  
3 204/298.19  
3 250/398  
3 315/111.21  
3 376/130  
3 428/408  
3 428/694TC  
2 204/192.11  
2 204/298.36  
2 250/251  
2 250/305  
2 250/397  
2 250/492.2  
2 250/492.21  
2 313/231.41  
2 313/360.1  
2 313/361.1  
2 315/111.61  
2 315/111.91  
2 376/147  
2 427/527  
2 427/580  
2 428/336  
2 976/DIG 437

Combined Classifications

11 250/423R  
10 315/111.81  
7 313/359.1  
6 250/251  
6 313/231.31  
6 315/111.41  
5 313/363.1  
5 315/111.21  
5 315/111.31  
4 204/192.11  
4 204/298.04

10797723\_CLS.txt

4 204/298.16  
4 250/427  
4 250/492.21  
4 313/362.1  
4 315/111.91  
4 376/130  
4 428/408  
3 60/202  
3 204/298.19  
3 250/398  
3 313/360.1  
3 427/580  
3 428/336  
3 428/694TC  
2 118/723I  
2 156/345.39  
2 204/298.36  
2 250/305  
2 250/397  
2 250/492.2  
2 313/231.41  
2 313/361.1  
2 315/111.61  
2 376/147  
2 427/523  
2 427/527  
2 976/DIG 437

Titles of Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10797723 on January 26, 2005

- 11 250/423R (3 OR, 8 XR)  
Class 250 : RADIANT ENERGY  
250/423R ION GENERATION
- 10 315/111.81 (2 OR, 8 XR)  
Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS  
315/111.01 DISCHARGE DEVICE LOAD WITH FLUENT MATERIAL  
SUPPLY TO THE DISCHARGE SPACE  
315/111.81 .Electron or ion source
- 7 313/359.1 (3 OR, 4 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/359.1 WITH POSITIVE OR NEGATIVE ION ACCELERATION
- 6 250/251 (4 OR, 2 XR)  
Class 250 : RADIANT ENERGY  
250/251 ELECTRICALLY NEUTRAL MOLECULAR OR ATOMIC BEAM  
DEVICES AND METHODS
- 6 313/231.31 (0 OR, 6 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/231.01 FLUENT MATERIAL SUPPLY OR FLOW DIRECTING MEANS  
313/231.31 .Plasma
- 6 315/111.41 (0 OR, 6 XR)  
Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS  
315/111.01 DISCHARGE DEVICE LOAD WITH FLUENT MATERIAL  
SUPPLY TO THE DISCHARGE SPACE  
315/111.21 .Plasma generating  
315/111.41 ..With magnetic field
- 5 313/363.1 (1 OR, 4 XR)  
Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
313/359.1 WITH POSITIVE OR NEGATIVE ION ACCELERATION  
313/363.1 .Extraction or target electrode
- 5 315/111.21 (2 OR, 3 XR)  
Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS  
315/111.01 DISCHARGE DEVICE LOAD WITH FLUENT MATERIAL  
SUPPLY TO THE DISCHARGE SPACE  
315/111.21 .Plasma generating
- 5 315/111.31 (0 OR, 5 XR)  
Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS  
315/111.01 DISCHARGE DEVICE LOAD WITH FLUENT MATERIAL  
SUPPLY TO THE DISCHARGE SPACE  
315/111.21 .Plasma generating  
315/111.31 ..With extraction electrode
- 4 204/192.11 (2 OR, 2 XR)  
Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY  
204/192.1 .Coating, forming or etching by sputtering  
204/192.11 ..Ion beam sputter deposition

- 4 204/298.04 (3 OR, 1 XR)  
 Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY  
 204/193 APPARATUS  
 204/298.01 .Coating, forming or etching by sputtering  
 204/298.02 ..Coating  
 204/298.04 ...Ion beam sputter deposition
- 4 204/298.16 (0 OR, 4 XR)  
 Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY  
 204/193 APPARATUS  
 204/298.01 .Coating, forming or etching by sputtering  
 204/298.02 ..Coating  
 204/298.16 ...Magnetically enhanced
- 4 250/427 (3 OR, 1 XR)  
 Class 250 : RADIANT ENERGY  
 250/423R ION GENERATION  
 250/427 .Electron bombardment type
- 4 250/492.21 (2 OR, 2 XR)  
 Class 250 : RADIANT ENERGY  
 250/492.1 IRRADIATION OF OBJECTS OR MATERIAL  
 250/492.2 .Irradiation of semiconductor devices  
 250/492.21 ..Ion bombardment
- 4 313/362.1 (0 OR, 4 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/359.1 WITH POSITIVE OR NEGATIVE ION ACCELERATION  
 313/362.1 .Supplying ionizable material (e.g., gas or vapor)
- 4 315/111.91 (2 OR, 2 XR)  
 Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS  
 315/111.01 DISCHARGE DEVICE LOAD WITH FLUENT MATERIAL  
 SUPPLY TO THE DISCHARGE SPACE  
 315/111.81 .Electron or ion source  
 315/111.91 ..Gas ionization type (e.g., ion pump or gauge source)
- 4 376/130 (1 OR, 3 XR)  
 Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES, SYSTEMS, AND ELEMENTS  
 376/100 NUCLEAR FUSION  
 376/121 .Magnetic confinement of plasma  
 376/127 ..With injection of electrically charged or accelerated particles  
 376/130 ...Neutral particle injection
- 4 428/408 (1 OR, 3 XR)  
 Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES  
 428/408 SELF-SUSTAINING CARBON MASS OR LAYER WITH IMPREGNANT OR OTHER LAYER
- 3 60/202 (2 OR, 1 XR)  
 Class 060 : POWER PLANTS  
 60/200.1 REACTION MOTOR (E.G., MOTIVE FLUID GENERATOR AND REACTION NOZZLE, ETC.)  
 60/202 .Ion motor
- 3 204/298.19 (0 OR, 3 XR)  
 Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY  
 204/193 APPARATUS

- 204/298.01 .Coating, forming or etching by sputtering  
 204/298.02 ..Coating  
 204/298.16 ...Magnetically enhanced  
 204/298.17 ....Flux passes through target surface  
 204/298.19 .....Planar magnetron
- 3 250/398 (0 OR, 3 XR)  
 Class 250 : RADIANT ENERGY  
 250/396R WITH CHARGED PARTICLE BEAM DEFLECTION OR  
 FOCUSsing  
 250/398 .With target means
- 3 313/360.1 (1 OR, 2 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/359.1 WITH POSITIVE OR NEGATIVE ION ACCELERATION  
 313/360.1 .Plural apertured electrodes
- 3 427/580 (1 OR, 2 XR)  
 Class 427 : COATING PROCESSES  
 427/457 DIRECT APPLICATION OF ELECTRICAL, MAGNETIC,  
 WAVE, OR PARTICULATE ENERGY  
 427/580 .Electrical discharge (e.g., arcs, sparks,  
 etc.)
- 3 428/336 (1 OR, 2 XR)  
 Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES  
 428/221 WEB OR SHEET CONTAINING STRUCTURALLY DEFINED  
 ELEMENT OR COMPONENT  
 428/332 .Physical dimension specified  
 428/334 ..Coating layer not in excess of 5 mils thick  
 or equivalent  
 428/335 ...Up to 3 mils  
 428/336 ....1 mil or less
- 3 428/694TC (0 OR, 3 XR)  
 Class 428 : STOCK MATERIAL OR MISCELLANEOUS ARTICLES  
 428/411.1 COMPOSITE (NONSTRUCTURAL LAMINATE)  
 428/688 .Of inorganic material  
 428/689 ..Metal-compound-containing layer  
 428/692 ...Defined magnetic layer  
 428/694R ....Dynamic recording medium  
 428/694T .....Metal thin film magnetic layer  
 428/694TP .....Topcoat, or protective overlayer  
 428/694TC .....Carbon
- 2 118/723I (1 OR, 1 XR)  
 Class 118 : COATING APPARATUS  
 118/715 GAS OR VAPOR DEPOSITION  
 118/722 .With treating means (e.g., jarring)  
 118/723R ..By creating electric field (e.g., gas  
 activation, plasma, etc.)  
 118/723I ...Radio frequency antenna or radio frequency  
 inductive coil discharge means
- 2 156/345.39 (1 OR, 1 XR)  
 Class 156 : ADHESIVE BONDING AND MISCELLANEOUS CHEMICAL  
 MANUFACTURE  
 156/345.1 DIFFERENTIAL FLUID ETCHING APPARATUS  
 156/345.39 .With means to generate and to direct a  
 reactive ion etchant beam at a workpiece
- 2 204/298.36 (0 OR, 2 XR)  
 Class 204 : CHEMISTRY: ELECTRICAL AND WAVE ENERGY

10797723\_CLSTITLES.txt

- 204/193 APPARATUS
- 204/298.01 .Coating, forming or etching by sputtering
- 204/298.31 ..Etching
- 204/298.36 ...Beam or directed flux etching (e.g., ion beam, etc.)
  
- 2 250/305 (0 OR, 2 XR)  
 Class 250 : RADIANT ENERGY  
 250/305 ELECTRON ENERGY ANALYSIS
  
- 2 250/397 (0 OR, 2 XR)  
 Class 250 : RADIANT ENERGY  
 250/396R WITH CHARGED PARTICLE BEAM DEFLECTION OR  
 FOCUSING  
 250/397 .With detector
  
- 2 250/492.2 (0 OR, 2 XR)  
 Class 250 : RADIANT ENERGY  
 250/492.1 IRRADIATION OF OBJECTS OR MATERIAL  
 250/492.2 .Irradiation of semiconductor devices
  
- 2 313/231.41 (0 OR, 2 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/231.01 FLUENT MATERIAL SUPPLY OR FLOW DIRECTING MEANS  
  
 313/231.31 .Plasma  
 313/231.41 ..Arc discharge type
  
- 2 313/361.1 (0 OR, 2 XR)  
 Class 313 : ELECTRIC LAMP AND DISCHARGE DEVICES  
 313/359.1 WITH POSITIVE OR NEGATIVE ION ACCELERATION  
 313/361.1 .Means for deflecting or focusing
  
- 2 315/111.61 (0 OR, 2 XR)  
 Class 315 : ELECTRIC LAMP AND DISCHARGE DEVICES: SYSTEMS  
  
 315/111.01 DISCHARGE DEVICE LOAD WITH FLUENT MATERIAL  
 SUPPLY TO THE DISCHARGE SPACE  
 315/111.21 .Plasma generating  
 315/111.41 ..With magnetic field  
 315/111.61 ...Acceleration
  
- 2 376/147 (0 OR, 2 XR)  
 Class 376 : INDUCED NUCLEAR REACTIONS: PROCESSES,  
 SYSTEMS, AND ELEMENTS  
 376/100 NUCLEAR FUSION  
 376/146 .Including removal or use of impurities or  
 reaction products (e.g., energy)  
 376/147 ..Direct conversion of energy
  
- 2 427/523 (1 OR, 1 XR)  
 Class 427 : COATING PROCESSES  
 427/457 DIRECT APPLICATION OF ELECTRICAL, MAGNETIC,  
 WAVE, OR PARTICULATE ENERGY  
 427/523 .Ion plating or implantation
  
- 2 427/527 (0 OR, 2 XR)  
 Class 427 : COATING PROCESSES  
 427/457 DIRECT APPLICATION OF ELECTRICAL, MAGNETIC,  
 WAVE, OR PARTICULATE ENERGY  
 427/523 .Ion plating or implantation  
 427/527 ..Silicon present in substrate, plating, or  
 implanted layer

2 976/DIG 437 (0 OR, 2 XR)  
Class 976 : NUCLEAR TECHNOLOGY  
976/DIG 427 ARRANGEMENTS FOR HANDLING RADIATION OR  
PARTICLES (e.g., focusing, moderating [G21K-1/00] \*\*\*  
(radiation filters DIG. 435)  
976/DIG 437 .Using charge exchange devices (e.g., for  
charges neutralizing or changing the sign of the electrical  
of beams) [G21K-1/14] \*\*\* (producing or accelerating  
neutral particle beams H05H-3/00).